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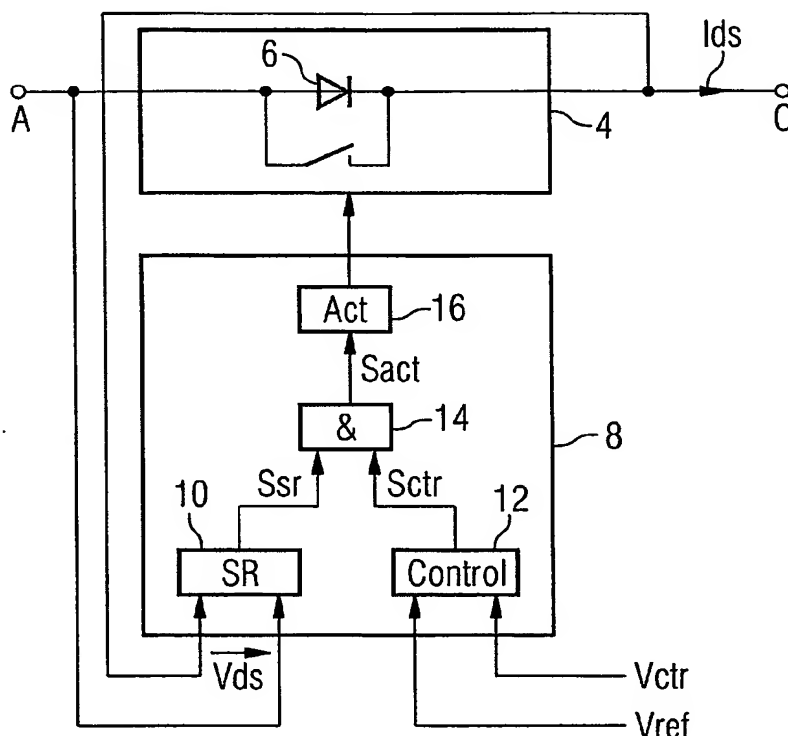
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(54) Title: OUTPUT VOLTAGE CONTROL OF A SYNCHRONOUS RECTIFIER



(57) Abstract: The trend towards more digital signal processing in mains-powered devices causes an increasing variety of supply voltages at ever decreasing levels and at higher currents. At present, the secondary side architecture provides a separate ac-dc conversion and dc-dc down-conversion stages in order to obtain stabilized voltages at those low levels. According to the present invention, a controlling synchronous rectifier is provided, comprising a power MOSFET and a control unit which allow to integrate both stages. In particular, according to the present invention, the output voltage of the synchronous rectifier is controlled by controlling the channel switching of the MOSFET. Advantageously, this provides for a very simple and efficient rectification and voltage control.



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